



FILE COPY

May 31, 2005

Ms. Bonnie Rolandelli

Associate Engineering Geologist

Regional Water Quality Control Board, North Coast Region

5550 Skylane Boulevard, Suite A

Santa Rosa, CA 95403

Re: Groundwater Monitoring Report, First Quarter 2005

Westport Community Store:

37001 North Highway One, Westport, Mendocino County, California

Clearwater Group Project No. ZB308E

Regional Water Quality Control Board Case No. 1TMC404

USTCF Claim No. 14259

Dear Ms. Rolandelli,

The Clearwater Group (Clearwater), on behalf of Mr. and Mrs. Charles Eagleton, is pleased to present the results of groundwater monitoring activities at the above-referenced property (**Figure 1**) for your review, comments and direction.

SITE DESCRIPTION

The site is located on a sloping coastal shelf which grades westwards, and rests 80 feet above sea level. The Pacific shoreline lies 600 feet west of the store. The property is located on undifferentiated early Tertiary marine sediments. The immediate vicinity of the site is underlain by clay-rich soils derived from the hills which rise sharply to the east. A seasonal, westward-flowing creek lies about $\frac{1}{4}$ mile south of the property, and Wages Creek, which also flows westward, lies about $\frac{3}{4}$ of a mile north of the property.

The town of Westport, with a population of about 50 people, has its own Community Water District, which includes a potable water system, sewer system, and community fire department. Potable water for the area is supplied by Wages Creek, which lies about ½ mile to the north of the site. Water is pumped from the creek and filtered to a 100,000-gallon storage tank ¼ mile northeast of the town. Both Wages Creek and the water tank locations can be seen on Figure 1. High clay content in the local soils results in low percolation and high run off of surface waters. Occupants of the town used to get water from small domestic wells: one still sits in the back yard of the subject property. However, due to these percolation and runoff effects, the local domestic wells became contaminated from septic field leachate waters. In response to this, in 1972, the State of California required the establishment of a Community Water District, and the town's water system was built in 1978.

INVESTIGATION BACKGROUND

The subject property is a combination residence and small community store and gas station, which has been in operation since the 1960s. One 1,000-gallon and one 550-gallon underground storage tank (UST) were removed from the property on November 20, 1998, and replaced with an above ground storage tank system. Soil and water samples collected during the excavation were shown by lab analyses to contain elevated concentrations of fuel hydrocarbons. In a letter dated February 16, 1999, the North Coast Regional Water Quality Control Board (NCRWQCB) requested that the spatial distribution of hydrocarbons in the subsurface be investigated.

Pursuant to the NCRWQCB's requests, Clearwater was retained, and installed, developed, surveyed and sampled three monitoring wells (MW-1, MW-2, and MW-3) at the subject location in July 1999. As indicated in Clearwater's letter *Phase II Initial Subsurface Investigation, Well Installation, Groundwater Monitoring Report* (September 17, 1999), only one groundwater sample from the three monitoring wells, MW-1, contained detectable elevated concentrations of fuel hydrocarbons, specifically methyl tertiary butyl ether (MTBE). No detectable concentrations of fuel hydrocarbons were found in any of the soil samples collected during well installation (Table 1 and Table 2).



In response to the results of this initial investigation, the NCRWQCB requested that the downgradient extent of the MTBE at the site be completely delineated (October 25, 1999). Clearwater was again retained, and installed two additional monitoring wells (MW-4 and MW-5) to the west of the store in April, 2000, and afterwards completed four quarters of groundwater monitoring of all five site wells, as specified in its workplan, and approved by the NCRWQCB. In Clearwater's report *Additional Site Investigation* (May 8, 2000), and final *Groundwater Monitoring Report, First Quarter 2001* (March 9, 2001), it was shown that no fuel hydrocarbons were detected in either of these new wells, and that MTBE at the site is limited to MW-1.

Groundwater monitoring resumed April of 2003 after verbal direction was received from the NCRWQCB to perform four quarters of groundwater monitoring. The NCRWQCB also renewed their request for the submittal of a Site Conceptual Model (SCM). Clearwater submitted the SCM to the NCRWQCB in January of 2004. The Board's acceptance of the SCM was followed with a request for further site investigation focusing on the area in the immediate vicinity of the location of the former USTs and the dispenser area. The Board requested the additional work in order to help determine the status of the project. Clearwater submitted a *Workplan for Further Investigation* to the NCRWQCB on February 12, 2004. The workplan was approved by the NCRWQCB in their February 26, 2004 letter.

On August 3, 2004 Clearwater supervised the drilling of five soil borings using direct push technology. Fast-Tek Engineering Support Services (Fast-Tek) of Point Richmond, California advanced soil borings B-1 through B-5 to approximately 20-feet bgs. The soils samples collected at the termination of each soil boring were retained for analysis by Kiff for concentrations of ; total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethyl benzene and xylenes (BTEX), MTBE, tertiary butyl alcohol (TBA), tertiary amyl methyl ether (TAME), ethyl tertiary butyl ether (ETBE), diisopropyl ether (DIPE) by EPA method 8260B at Kiff Analytical LLC (Kiff), Davis, California, a California Department of Health Services certified laboratory.. A grabwater sample was also collected at the termination of each soil boring and submitted for the same analytical suite. Clearwater summarized the findings in a report, *Results of Additional Investigation*,



dated September 24, 2004, concluding that the tight clay formation observed while drilling indicated a relatively low K value (hydraulic conductivity) while The high TPHg to benzene ratio indicated the presence of weathered gasoline.

Groundwater Monitoring Field Activities

Clearwater conducted groundwater monitoring and sampling field activities on February 18, 2005. All work was performed in accordance with Clearwater's Field Protocols (**Attachment A**). The wells were checked for the presence of SPH. An electronic water level indicator was used to gauge depth to water accurate to within ± 0.01 feet. The wells were purged of groundwater until sampling parameters (e.g. temperature, pH and conductivity) stabilized, which occurred by approximately three wet casing volumes. Groundwater monitoring and well purging information was recorded on the Well Gauging/Purging Calculations and Purge Data sheets (**Attachment B**). To prevent cross-contamination, purging devices were decontaminated between wells in an Alconox® wash followed by double rinsing in clean tap water. Following the recovery of water levels to at least 80% of their static levels, Clearwater collected groundwater samples from the monitoring wells using new disposable polyethylene bailers. Samples were labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the project laboratory. Purge water and rinse ate were stored in labeled 55-gallons drums pending disposal.

The groundwater samples were analyzed for; TPHg, BTEX, MTBE, TBA, TAME, ETBE, DIPE, 1,2-Dichloroethane (1,2-DCA) and 1,2-Dibromoethane (EDB) at Kiff (see Kiff laboratory report # 42472 in **Attachment C**)

Groundwater Monitoring Results

On February 18, 2005, the depth of water ranged from 2.54 feet bgs (MW-4) to 16.21 feet bgs (MW-3) creating a gradient of 0.02 feet/feet in a north by northwest direction (**Figure 3**). Observable floating product was not detected in any of the monitoring wells. The only reportable concentrations of MTBE detected in the samples were collected from MW-1 at 120 parts per billion or micrograms per liter ($\mu\text{g/L}$) (**Figure 4**). The laboratory reported that all of the other samples submitted did not contain



concentrations of petroleum related hydrocarbons above the laboratory reporting limits (Table 3).

CONCLUSIONS AND RECOMMENDATIONS

Two of the five groundwater monitoring wells were not sampled this quarter due to accessibility issues. A vending machine too large for one person to move was inadvertently placed over MW-2. The well casing of MW-3 has been compromised approximately 2 feet bgs (Figure 5). Clearwater relayed the site conditions to the NCRWQCB on March 7, 2005 via email.

The MTBE concentrations detected in MW-1 have increased this quarter, however there is an overall declining trend in concentration values in this well (Figure 6). The MTBE concentrations observed in MW-1 experience a seasonal fluctuation. As the groundwater level increases within the well, the concentration of MTBE also increases as hydrocarbons are dissolved into the groundwater from the sorbed phase.. The groundwater gradient continues to be in a west by northwest direction.

Clearwater has recommended that the Site Conceptual Model submitted in January 2004 be updated to include the additional soil and groundwater monitoring investigation data. Upon completion of the SCM Update the project should be evaluated to determine if the site meets all of the criteria for closure using the RWQCB "Low-Risk Closure" Guidelines. If the NCRWQCB does not concur with the application of the "Low-Risk" Guidelines for site closure, then Clearwater recommends that a Remedial Action Plan be prepared to address the residual contamination remaining in the soil. Per the verbal request made by the NCRWQCB on March 16, 2005, Clearwater will continue to conduct quarterly groundwater monitoring activities at the project site until the project is reviewed by the NCRWQCB and the next course of action determined



Certification


This report was prepared under the supervision of a Professional Geologist in the State of California. All statements, conclusions and recommendations are based solely upon published results from previous consultants, field observations by Clearwater and laboratory analyses performed by a State of California certified laboratory related to the work performed by Clearwater.

Information and interpretation presented herein are for the sole use of the client and regulating agency. The information and interpretation contained in this document should not be relied upon by a third party.

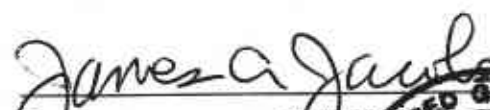
The service provided by Clearwater has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of this profession currently practicing under similar conditions in the area of the site. No other warranty, expressed or implied, is made.

Prepared by:

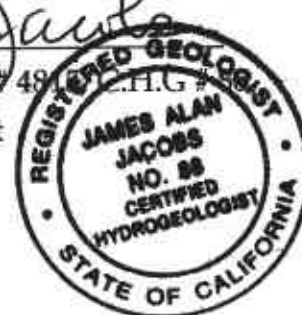
Reviewed by:



Jessica Chiaro
Project Scientist



James A Jacobs, P.G. # 48121
Chief Hydrogeologist



REGISTERED GEOLOGIST
JAMES ALAN JACOBS
NO. 88
CERTIFIED HYDROGEOLOGIST
STATE OF CALIFORNIA

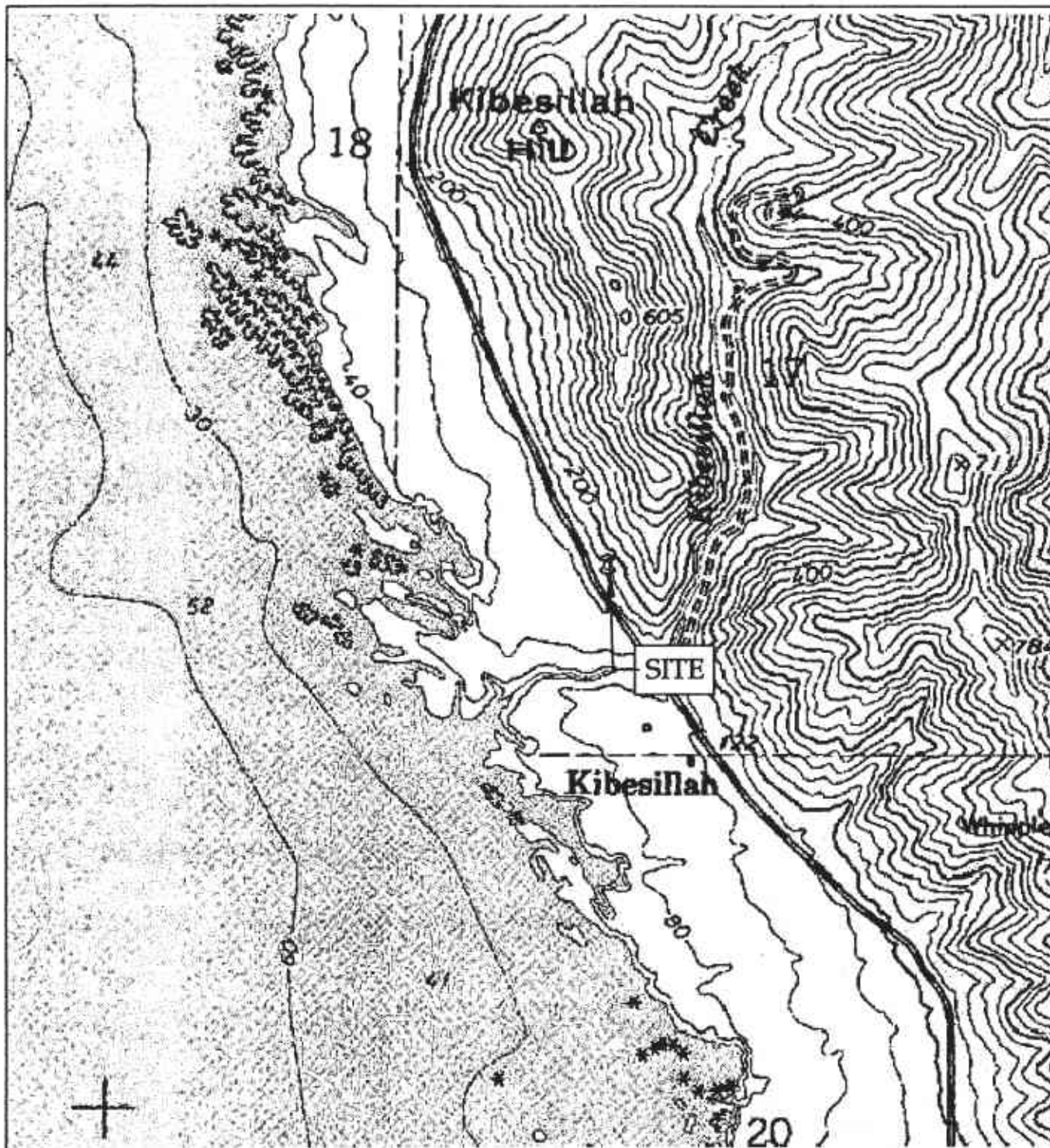
cc Mr. Charles W. Eagleton, 16499 Crescent Court, Hidden Valley Lake, CA, 95461



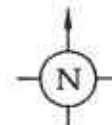
ATTACHMENTS

- Figure 1: Site Location Map
- Figure 2: Site Plan
- Figure 3: Groundwater Elevation Map - 2/18/05
- Figure 4: MTBE Iso-concentration Map - 2/18/05
- Figure 5: MW-3 Photograph
- Figure 6: MTBE Concentration Over Time (MW-1)
- Table 1: Groundwater Monitoring Well Construction Details
- Table 2: Soil Sampling Analytical Results
- Table 3: Groundwater Elevations and Sample Analytical Results
- Appendix A: Clearwater Field Protocols
- Appendix B: Clearwater Gauge/Purge Calculations & Well Purging Data
- Appendix C: Laboratory Report # 42472 and Chain-of-Custody Form

FIGURES



NOT TO SCALE



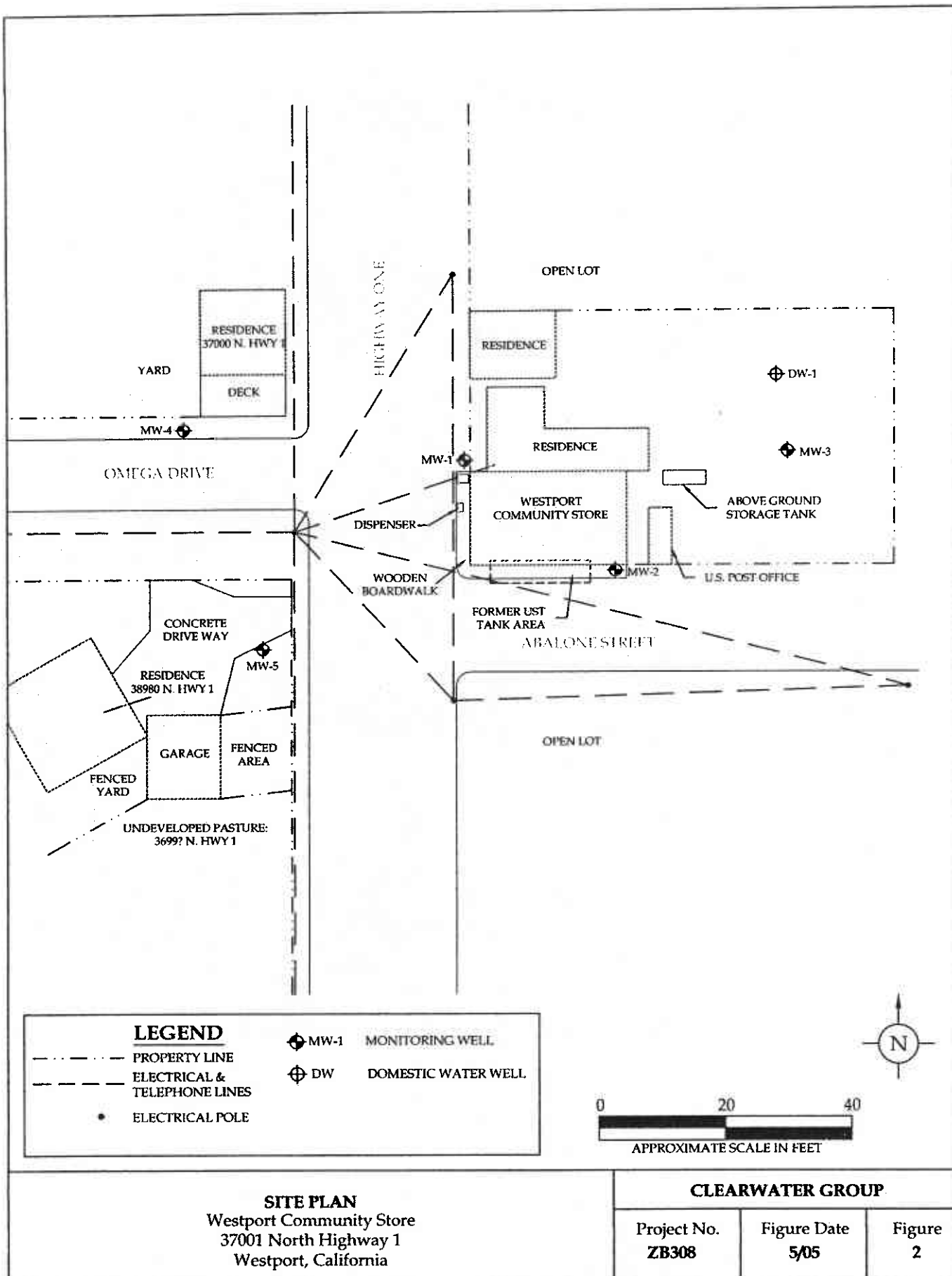
SITE LOCATION MAP
 Westport Community Store
 37001 North Highway 1
 Westport, California

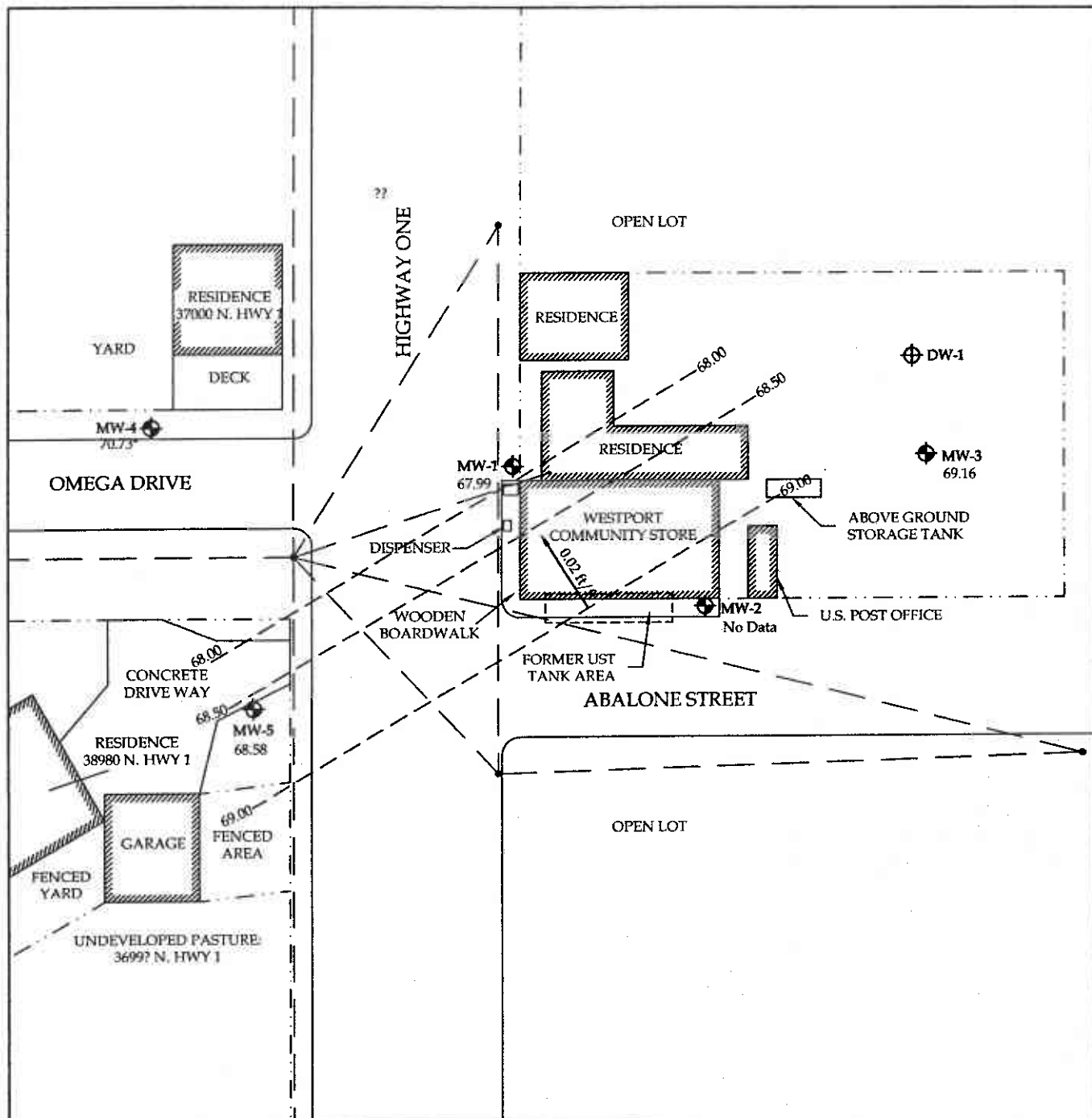
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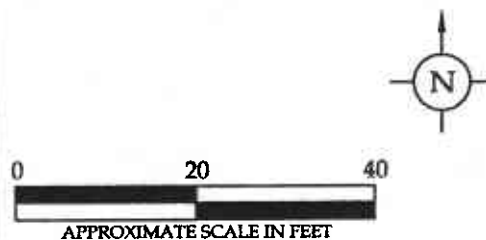
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LEGEND			
67.21	GROUNDWATER ELEVATION ON 4/11/00 (APPROX. FEET MSL)	◆ MW-1	MONITORING WELL
- - -	ESTIMATED GROUNDWATER ELEVATION CONTOUR (APPROX. FEET MSL)	⊕ DW	DOMESTIC WATER WELL
0.05 FT/FT	APPROX. GROUNDWATER FLOW DIRECTION & GRADIENT	◆ PB-4	PROPOSED BORING
		70.73*	ANOMALOUS DATA; NOT USED IN GWE CONTOUR



GROUNDWATER ELEVATIONS

FEBRUARY 18, 2005

Westport Community Store

37001 North Highway 1

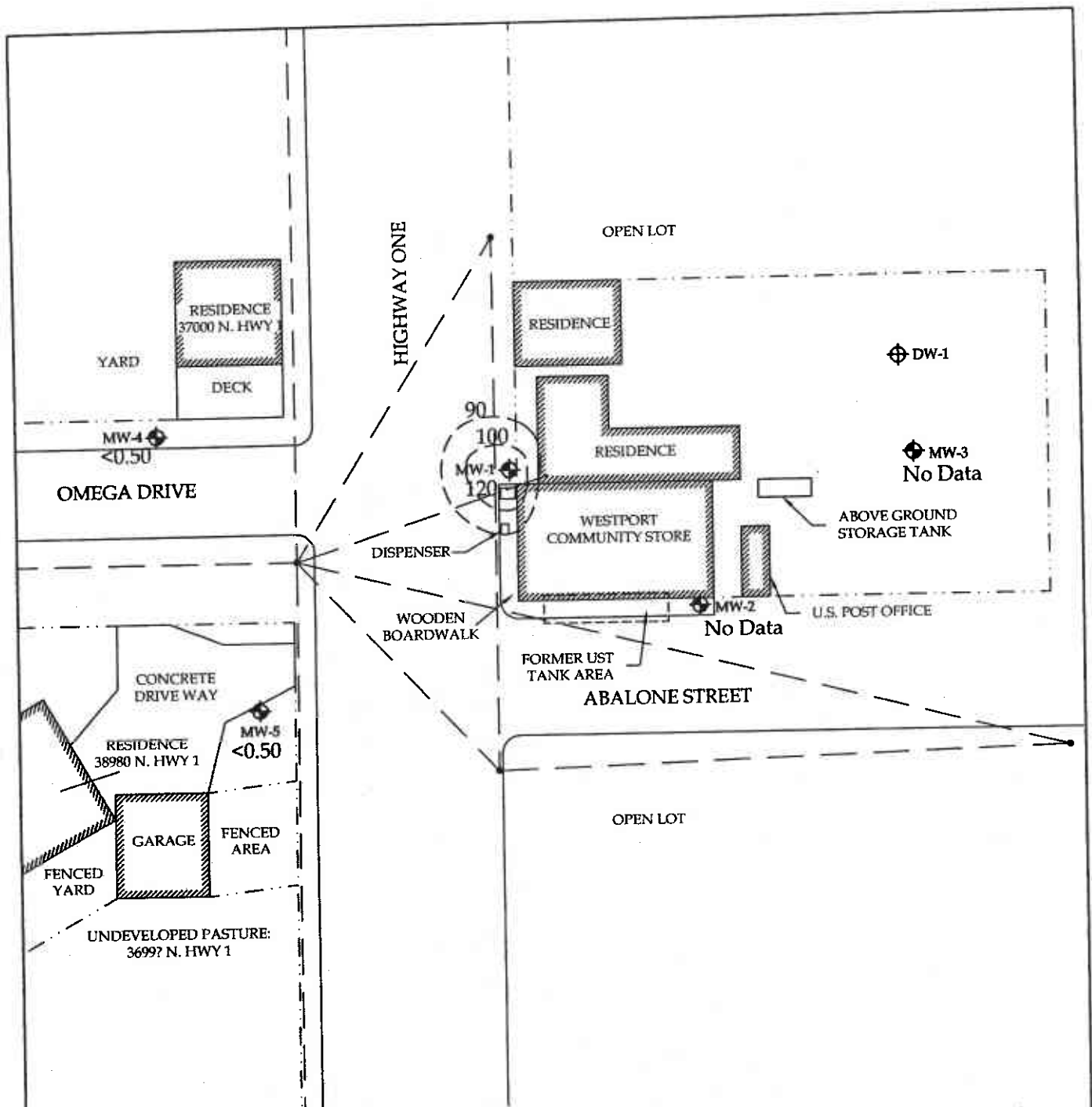
Westport, California

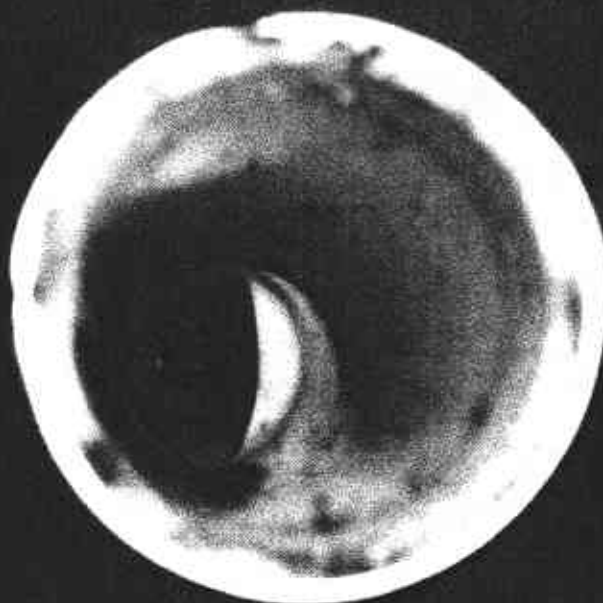
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ZB308E

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MONITORING WELL - 3
Westport Community Store
37001 Hwy 1 North
Westport, CA

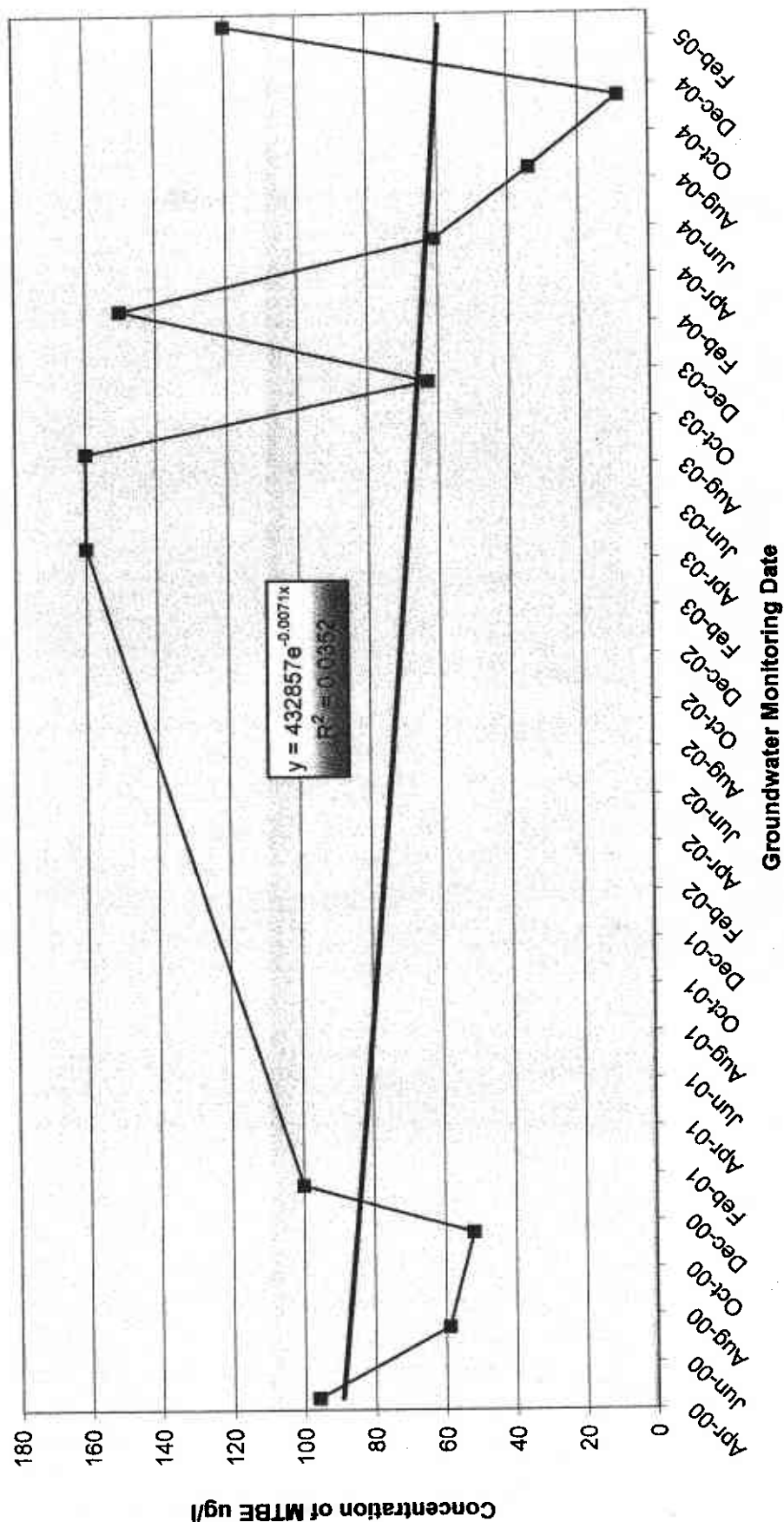
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ZB308E

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5

FIGURE 6
CONCENTRATION OF MTBE IN MW-1
Westport Community Store
37001 North Highway 1
Westport, CA
ZB308E



TABLES

TABLE 1
GROUNDWATER MONITORING WELL CONSTRUCTION DETAILS

Westport Community Store

37001 North Highway 1

Westport, CA

Clearwater Group Project No. ZB308E

WELL No.	CONSTRUCTION Date	WELL CASE		WELL BORING DIAMETER (Inches)	TOTAL DEPTH (feet bgs)	SCREENED INTERVAL (feet bgs)		SAND PACK INTERVAL (feet bgs)		BENTONITE INTERVAL (feet bgs)		CONCRETE INTERVAL (feet bgs)	
		DIAMETER (Inches)	BORING DIAMETER (Inches)										
MW-1	13-Jul-99	2.0	8.0	8.0	21.0	5.0-20.0	3.0-21.0	2.0-3.0	0.0-2.0				
MW-2	13-Jul-99	2.0	8.0	8.0	21.0	5.0-20.0	3.0-21.0	2.0-3.0	0.0-2.0				
MW-3	13-Jul-99	2.0	8.0	8.0	21.0	5.0-20.0	3.0-21.0	2.0-3.0	0.0-2.0				
MW-4	13-Apr-00	2.0	8.0	8.0	21.0	5.0-20.0	4.0-21.0	2.0-4.0	0.0-2.0				
MW-5	13-Apr-00	2.0	8.0	8.0	18.0	4.5-17.5	3.5-18.0	1.5-3.5	0.0-1.5				

TABLE 2
SOIL SAMPLING ANALYTICAL RESULTS
 Westport Community Store
 37001 North Highway 1
 Westport, California
 Clearwater Project No. ZB308E

Sample (#)	Sampling Date	TPHg (mg/Kg)	TPHd (mg/Kg)	B (mg/Kg)	T (mg/Kg)	E (mg/Kg)	X (mg/Kg)	MTBE* (mg/Kg)	Lead (mg/Kg)
MW-1-10	13-Jul-99	<1	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<5
MW-2-15	13-Jul-99	<1	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<5
MW-3-16	13-Jul-99	<1	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<5
SP-1	13-Apr-00	<1	---	<0.005	<0.005	<0.005	<0.005	<0.05	11
SP-2	13-Apr-00	<1	---	<0.005	<0.005	<0.005	<0.005	<0.05	29
SP-3	13-Apr-00	<1	---	<0.005	<0.005	<0.005	<0.005	<0.05	80

NOTES: SOIL SAMPLES

TPHg Total petroleum hydrocarbons as gasoline using EPA Method 8015/8020(modified)
 TPHd Total petroleum hydrocarbons as gasoline using EPA Method 8015/8020(modified)
 B Benzene using EPA Method 8015/8020 (modified)
 T Toluene using EPA Method 8015/8020 (modified)
 E Ethyl benzene using EPA Method 8015/8020 (modified)
 X Xylenes using EPA Method 8015/8020 (modified)
 MTBE* Methyl tertiary-butyl ether using EPA Method 8260
 *70 other chemicals are measured by 8260: all these too were ND.
 Lead Total lead by EPA Method 6010B
 mg/Kg Milligrams per kilogram (approximately equal to parts per million)
 <## Not detected in concentrations exceeding the indicated laboratory reporting limit

TABLE 3
GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS
 Westport Community Store
 37001 North Highway 1
 Westport, California
 Clearwater Project No. ZB308E

Sample (#)	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)
MW-1	27-Jul-99	80.00	13.81	66.19	<50	<0.50	<0.50	<0.50	<0.50	36* / 27	<5.0	<5.0	<5.0	<20
	13-Apr-00	80.00	12.18	67.82	68‡	<0.50	<0.50	<0.50	<0.50	96	--	--	--	--
	28-Jul-00	80.00	13.42	66.58	76	<0.50	1.0	<0.50	<0.50	59	--	--	--	--
	1-Nov-00	80.00	14.71	65.29	54‡	<0.50	<0.50	<0.50	<0.50	52	--	--	--	--
	29-Jan-01	80.00	12.38	67.62	66‡	<0.50	<0.50	<0.50	<0.50	100	--	--	--	--
	22-Apr-03	79.41	10.67	68.74	<50	<0.50	<0.50	<0.50	<0.50	160	<0.5	<0.5	<0.5	9.0
	19-Aug-03	79.41	14.31	65.10	<50	<0.50	<0.50	<0.50	<0.50	160	<0.5	<0.5	<0.5	<5.0
	11-Nov-03	79.41	15.11	64.30	<50	<0.50	<0.50	<0.50	<0.50	63	<0.5	<0.5	<0.5	<5.0
	10-Feb-04	79.41	11.33	68.08	<50	<0.50	<0.50	<0.50	<0.50	150	<0.5	<0.5	<0.5	<0.5
	12-May-04	79.41	12.56	66.85	<50	<0.50	<0.50	<0.50	<0.50	61	<0.5	<0.5	<0.5	<5.0
	3-Aug-04	79.41	14.55	64.86	<50	<0.50	<0.50	<0.50	<0.50	34	<0.5	<0.5	<0.5	<5.0
	1-Nov-04	79.41	14.84	64.57	<50	<0.50	<0.50	<0.50	<0.50	8.7	<0.5	<0.5	<0.5	<5.0
	18-Feb-05	79.41	11.42	67.99	<50	<0.50	<0.50	<0.50	<0.50	120	<0.5	<0.5	<0.5	10
MW-2	27-Jul-99	82.18	15.39	66.79	<50	<0.50	<0.50	<0.50	<0.50	<5.0*	<5.0	<5.0	<5.0	<20
	13-Apr-00	82.18	13.82	68.36	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--
	28-Jul-00	82.18	14.93	67.25	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--
	1-Nov-00	82.18	16.47	65.71	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--
	22-Apr-03	81.59	12.11	69.48	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	19-Aug-03	81.59	15.88	65.71	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	11-Nov-03	81.59	16.82	64.77	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	10-Feb-04	81.59	13.31	68.28	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	12-May-04	81.59	13.97	67.62	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	3-Aug-04	81.59	16.07	65.52	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	1-Nov-04	81.59	16.53	65.06	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	18-Feb-05	81.59	Unable to Access TOC											
MW-3	27-Jul-99	85.96	18.54	67.42	<50	<0.50	<0.50	<0.50	<0.50	<5.0*	<5.0	<5.0	<5.0	<20
	13-Apr-00	85.96	16.83	69.13	68	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--
	28-Jul-00	85.96	17.97	67.99	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--
	1-Nov-00	85.96	19.55	66.41	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--
	29-Jan-01	85.96	17.50	68.46	110‡	<0.50	1.3	<0.50	<0.50	<5.0	--	--	--	--
	22-Apr-03	85.37	15.89	69.48	<50	<0.50	<0.50	<0.50	<0.50	0.99	<0.5	<0.5	<0.5	<5.0
	19-Aug-03	85.37	19.09	66.28	<50	<0.50	<0.50	<0.50	<0.50	0.64	<0.5	<0.5	<0.5	<5.0
	11-Nov-03	85.37	19.82	65.55	Not enough water to collect a sample									
	10-Feb-04	85.37	17.05	68.32	<50	<0.50	<0.50	<0.50	<0.50	0.83	<0.5	<0.5	<0.5	<5.0
	12-May-04	85.37	17.12	68.25	<50	<0.50	<0.50	<0.50	<0.50	1.1	<0.5	<0.5	<0.5	<5.0
	3-Aug-04	85.37	19.32	66.05	Not enough water to collect a sample									
	1-Nov-04	85.37	19.39	65.98	Not enough water to collect a sample									
	18-Feb-05	85.37	16.21	69.16	Well Casing Damaged Unable to Collect Sample									

TABLE 3
GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS

Westport Community Store
37001 North Highway 1
Westport, California
Clearwater Project No. ZB308E

Sample (#)	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)
MW-4	13-Apr-00	73.86	8.10	65.76	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--
	28-Jul-00	73.86	9.92	63.94	81	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--
	1-Nov-00	73.86	9.64	64.22	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--
	29-Jan-01	73.86	6.55	67.31	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--
	22-Apr-03	73.27	5.36	67.91	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	19-Aug-03	73.27	10.31	62.96	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	15-Nov-03	73.27	10.35	62.92	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	10-Feb-04	73.27	5.65	67.62	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	12-May-04	73.27	8.26	65.01	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	3-Aug-04	73.27	10.41	62.86	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	1-Nov-04	73.27	9.57	63.70	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	18-Feb-05	73.27	2.54	70.73	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
MW-5	13-Apr-00	77.68	9.73	67.95	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--
	28-Jul-00	77.68	11.13	66.55	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--
	1-Nov-00	77.68	12.28	65.40	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--
	29-Jan-01	77.68	9.75	67.93	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	--
	22-Apr-03	77.09	7.41	69.68	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	19-Aug-03	77.09	11.80	65.29	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	11-Nov-03	77.09	12.61	64.48	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	10-Feb-04	77.09	8.50	68.59	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	12-May-04	77.09	9.88	67.21	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	3-Aug-04	77.09	11.03	66.06	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	1-Nov-04	77.09	12.31	64.78	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0
	18-Feb-05	77.09	8.51	68.58	<50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<5.0

NOTES:

DTW	Depth to water
TOC	Top of well casing (Surveyed to Mean Sea Level [MSL] on April 22, 2003)
GWE	Groundwater elevation relative to MSL (GWE = TOC - DTW)
TPHg	Total petroleum hydrocarbons as gasoline using EPA Method 8015 (modified)
B	Benzene using EPA Method 8020
T	Toluene using EPA Method 8020
E	Ethylene using EPA Method 8020
X	Xylenes using EPA Method 8020
MTBE	Methyl tertiary-butyl ether using EPA Method 8260
DIPE	Diisopropyl ether using EPA Method 8260
ETBE	Ethyl tertiary-butyl ether using EPA method 8260
TAME	Tertiary-amyl methyl ether using EPA method 8260
TBA	Tertiary butanol using EPA method 8260
µg/L	Micrograms per liter (approximately equal to parts per billion: ppb)
<###	Not detected in concentrations exceeding the indicated laboratory reporting limit
--	Sampled not tested for respective analyte
†	Lab note: "Within quantification range, but atypical for fuel pattern."
*	Initial MTBE readings by EPA Method 8020

ATTACHMENT A

CLEARWATER GROUP

Groundwater Monitoring and Sampling Field Procedures

Groundwater Monitoring

Prior to beginning, a decontamination area is established. Decontamination procedures consist of scrubbing downhole equipment in an Alconox® solution wash (wash solution is pumped through any purging pumps used), and rinsing in a first rinse of potable water and a second rinse of potable water or deionized water if the latter is required. Any non-dedicated downhole equipment is decontaminated prior to use.

Prior to gauging, purging, and sampling a well, caps for all on-site wells should be opened to allow atmospheric pressure to equalize if local groundwater is under confined or semi-confined condition. The static water level is measured to the nearest 0.01 feet with electronic water sounder. Depth to bottom is typically measured once per year, at the request of the project manager, and during Clearwater's first visit to a site. If historical analytical data are not available, with which to establish a reliable order of increasing well contamination, the water sounder and tape will be decontaminated between each well. If floating separate-phase hydrocarbons (SPH) are suspected or observed, SPH is collected using a clear, open-ended product bailer, and the thickness is measured to the nearest 0.01 feet in the bailer. SPH may alternatively be measured with an electronic interface probe. Any monitoring well containing a measurable thickness of SPH before or during purging is not additionally purged and no sample is collected from that well. Wells containing hydrocarbon sheen are sampled unless otherwise specified by the project manager. Field observations such as well integrity as well as water level measurements and floating product thicknesses are noted on the Gauging Data/Purge Calculations form.

Well Purging

Each monitoring well to be sampled is purged using either a PVC bailer or a submersible pump. Physical parameters (pH, temperature and conductivity) of the purge water are monitored during purging activities to assess if the water sample collected is representative of the aquifer. If required, parameters such as dissolved oxygen, turbidity, salinity etc. are also measured. Samples are considered representative if parameter stability is achieved. Stability is defined as a change of less than 0.25 pH units, less than 10% change in conductivity in micro mhos, and less than 1.0 degree centigrade (1.8 degrees Fahrenheit) change in temperature. Parameters are measured in a discreet sample decanted from the bailer separately from the rest of the purge water. Parameters are measured at least four times during purging; initially, and at volume intervals of one well volume. Purging continues until three well casing volumes have been removed or until the well completely dewater. Wells which dewater or demonstrate a slow recharge may be sampled after fewer than three well volumes have been removed. Well purging information is recorded on the Purge Data sheet. All meters used to measure parameters are calibrated daily. Purge water is sealed, labeled, and stored on site in D.O.T.-approved 55-gallon drums. After being chemically profiled, the water is removed to an appropriate disposal facility by a licensed waste hauler.

Groundwater Sample Collection

Groundwater samples are collected immediately after purging or, if purging rate exceeds well recharge rate, when the well has recharged to at least 80% of its static water level. If recharge is extremely slow, the well is allowed to recharge for at least two hours, if practicable, or until sufficient volume has accumulated for sampling. The well is sampled within 24 hours of purging or repurged. Samples are collected using polyethylene bailers, either disposable or dedicated to the well. Samples being analyzed for compounds most sensitive to volatilization are collected first. Water samples are placed in appropriate laboratory-supplied containers, labeled, documented on a chain of custody form and placed on ice in a cooler for transport to a state-certified analytical laboratory. Analytical detection limits match or surpass standards required by relevant local or regional guidelines.

Quality Assurance Procedures

To prevent contamination of the samples, Clearwater personnel adhere to the following procedures in the field:

- A new, clean pair of latex gloves is put on prior to sampling each well.
- Wells are gauged, purged and groundwater samples are collected in the expected order of increasing degree of contamination based on historical analytical results.

- All purging equipment will be thoroughly decontaminated between each well, using the procedures previously described at the beginning of this section.
- During sample collection for volatile organic analysis, the amount of air passing through the sample is minimized. This helps prevent the air from stripping the volatiles from the water. Sample bottles are filled by slowly running the sample down the side of the bottle until there is a convex meniscus over the mouth of the bottle. The lid is carefully screwed onto the bottle such that no air bubbles are present within the bottle. If a bubble is present, the cap is removed and additional water is added to the sample container. After resealing the sample container, if bubbles still are present inside, the sample container is discarded and the procedure is repeated with a new container.

Laboratory and field handling procedures may be monitored, if required by the client or regulators, by including quality control (QC) samples for analysis with the groundwater samples. Examples of different types of QC samples are as follows:

- Trip blanks are prepared at the analytical laboratory by laboratory personnel to check field handling procedures. Trip blanks are transported to the project site in the same manner as the laboratory-supplied sample containers to be filled. They are not opened, and are returned to the laboratory with the samples collected. Trip blanks are analyzed for purgeable organic compounds.
- Equipment blanks are prepared in the field to determine if decontamination of field sampling equipment has been effective. The sampling equipment used to collect the groundwater samples is rinsed with distilled water which is then decanted into laboratory-supplied containers. The equipment blanks are transported to the laboratory, and are analyzed for the same chemical constituents as the samples collected at the site.
- Duplicates are collected at the same time that the standard groundwater samples are being collected and are analyzed for the same compounds in order to check the reproducibility of laboratory data. They are typically only collected from one well per sampling event. The duplicate is assigned an identification number that will not associate it with the source well.

Generally, trip blanks and field blanks check field handling and transportation procedures. Duplicates check laboratory procedures. The configuration of QC samples is determined by Clearwater depending on site conditions and regulatory requirements.

ATTACHMENT B

PURGING DATA

SHEET 1 OF 1

Job No: 2B308E Location: 37001 North Hwy 1 Westport, CA Date: 2/18/05 Tech: RODNEY BERRY

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
<u>rw-5</u>	<u>10:00</u>	<u>1.00</u>	<u>293</u>	<u>56.5</u>	<u>5.71</u>	Sample for: <input checked="" type="checkbox"/> TPHg TPHd 8010 <input checked="" type="checkbox"/> BTEX Other <u>50XYS/LEAD SCAVS</u> Purging Method: <u>DISPOSABLE</u> PVC bailer / Pump Sampling Method: <u>Dedicated / Disposable bailer</u>
Calc. purge	<u>10:52</u>	<u>3.00</u>	<u>292</u>	<u>56.5</u>	<u>5.70</u>	
volume	<u>10:55</u>	<u>4.00</u>	<u>293</u>	<u>56.5</u>	<u>5.70</u>	
<u>3.82</u>						

COMMENTS: color, turbidity, recharge, sheen
BROWN, high, good, NO SHEEN

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
<u>M-4</u>	<u>11:12</u>	<u>3.00</u>	<u>231</u>	<u>55.2</u>	<u>6.06</u>	Sample for: <input checked="" type="checkbox"/> TPHg TPHd 8010 <input checked="" type="checkbox"/> BTEX Other <u>50XYS/LEAD SCAVS 8260</u> Purging Method: <u>DISPOSABLE</u> PVC bailer / Pump Sampling Method: <u>Dedicated / Disposable bailer</u>
Calc. purge	<u>11:16</u>	<u>6.00</u>	<u>230</u>	<u>55.2</u>	<u>6.04</u>	
volume	<u>12:24</u>	<u>8.00</u>	<u>231</u>	<u>55.2</u>	<u>6.02</u>	
<u>7.84</u>						

COMMENTS: color, turbidity, recharge, sheen
GREEN, low, good, NO SHEEN

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH	
<u>M-4</u>	<u>11:42</u>	<u>1.00</u>	<u>453</u>	<u>57.7</u>	<u>6.27</u>	Sample for: <input checked="" type="checkbox"/> TPHg TPHd 8010 <input checked="" type="checkbox"/> BTEX Other <u>50XYS/LEAD SCAVS 8260</u> Purging Method: <u>DISPOSABLE</u> PVC bailer / Pump Sampling Method: <u>Dedicated / Disposable bailer</u>
Calc. purge	<u>11:42</u>	<u>2.00</u>	<u>454</u>	<u>57.7</u>	<u>6.26</u>	
volume	<u>11:52</u>	<u>3.00</u>	<u>454</u>	<u>57.7</u>	<u>6.26</u>	
<u>3.23</u>						

COMMENTS: color, turbidity, recharge, sheen
BROWN, high, good, NO SHEEN

CLEARWATER GROUP, 229 Tewksbury Ave., Point Richmond, California 94801

Phone: 510-307-9943 Fax: 510-232-2823

DAILY FIELD REPORT

Page: 1 of 1

Date: 2/18/05
 Field Engineer/Technician: RODNEY BERRY
 Project Name: Westport Community Store
 Project Number: CB308E

Company/Client: TAG Inc. aka Clearwater Group
 Project Manager: JESSICA CHAILO
 Site Contact: _____

EVENTS/COMMENTS/REMARKS

8:00 I left for Westport
8:30 I arrived at site. I started opening the wells. Once I got to MW-2 I could not find it. So I asked MARK and he said the some guys moving a core machine for more guys and they probably put over the well cover. MW-3 PVC pipe ten inches down had been pushed in. So I could not put a bailer inside.
12:00 I left for the office.
 (P.S. I put new caps on MW-1 & MW-2)
 It RAINED the whole time I was in Westport.
4:30 I arrived at the yard at 4:30
5:30 I went home

Signature: _____ Date: _____ Attachments: _____ Figures Included: _____

ATTACHMENT C



Report Number : 42472

Date : 2/28/2005

Jessica Chiaro
Clearwater Group, Inc
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 3 Water Samples
Project Name : WESTPORT COMMUNITY STORE
Project Number : ZB308E

Dear Ms. Chiaro,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff



Report Number : 42472

Date : 2/28/2005

Project Name : WESTPORT COMMUNITY STORE

Project Number : ZB308E

Sample : MW-1

Matrix : Water

Lab Number : 42472-01

Sample Date : 2/18/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Methyl-t-butyl ether (MTBE)	120	0.50	ug/L	EPA 8260B	2/23/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Tert-Butanol	10	5.0	ug/L	EPA 8260B	2/23/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	2/23/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Toluene - d8 (Surr)	99.1		% Recovery	EPA 8260B	2/23/2005
4-Bromofluorobenzene (Surr)	98.0		% Recovery	EPA 8260B	2/23/2005
Dibromofluoromethane (Surr)	100		% Recovery	EPA 8260B	2/23/2005
1,2-Dichloroethane-d4 (Surr)	99.3		% Recovery	EPA 8260B	2/23/2005

Approved By:

Joel Kiff



Report Number : 42472

Date : 2/28/2005

Project Name : WESTPORT COMMUNITY STORE

Project Number : ZB308E

Sample : MW-4

Matrix : Water

Lab Number : 42472-02

Sample Date : 2/18/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	2/23/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	2/23/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	2/23/2005
4-Bromofluorobenzene (Surr)	99.2		% Recovery	EPA 8260B	2/23/2005
Dibromofluoromethane (Surr)	96.1		% Recovery	EPA 8260B	2/23/2005
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	2/23/2005

Approved By:

Joel Kiff



Report Number : 42472

Date : 2/28/2005

Project Name : WESTPORT COMMUNITY STORE

Project Number : ZB308E

Sample : MW-5

Matrix : Water

Lab Number : 42472-03

Sample Date : 2/18/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	2/23/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	2/23/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Toluene - d8 (Surr)	99.3		% Recovery	EPA 8260B	2/23/2005
4-Bromofluorobenzene (Surr)	98.5		% Recovery	EPA 8260B	2/23/2005
Dibromofluoromethane (Surr)	95.8		% Recovery	EPA 8260B	2/23/2005
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	2/23/2005

Approved By:

Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 42472

Date : 2/28/2005

QC Report : Method Blank Data


Project Name : **WESTPORT COMMUNITY STORE**

Project Number : **ZB308E**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	2/23/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	2/23/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Toluene - d8 (Surr)	99.7	%	%	EPA 8260B	2/23/2005
4-Bromofluorobenzene (Surr)	104	%	%	EPA 8260B	2/23/2005
Dibromofluoromethane (Surr)	97.1	%	%	EPA 8260B	2/23/2005
1,2-Dichloroethane-d4 (Surr)	102	%	%	EPA 8260B	2/23/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	2/23/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	2/23/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	2/23/2005
Toluene - d8 (Surr)	99.0	%	%	EPA 8260B	2/23/2005
4-Bromofluorobenzene (Surr)	97.9	%	%	EPA 8260B	2/23/2005
Dibromofluoromethane (Surr)	103	%	%	EPA 8260B	2/23/2005
1,2-Dichloroethane-d4 (Surr)	101	%	%	EPA 8260B	2/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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Approved By:


Joel Kliff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 42472

Date : 2/28/2005

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **WESTPORT COMMUNITY**

Project Number : **ZB308E**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Limit	Relative Percent Diff.	Relative Percent Limit
Benzene	42456-14	<0.50	40.0	40.0	39.6	39.0	ug/L	EPA 8260B	2/23/05	99.0	97.6	1.43	70-130	25	25
Toluene	42456-14	5.2	40.0	40.0	42.9	42.1	ug/L	EPA 8260B	2/23/05	94.3	92.2	2.26	70-130	25	25
Tert-Butanol	42456-14	<5.0	200	200	196	196	ug/L	EPA 8260B	2/23/05	98.1	98.3	0.141	70-130	25	25
Methyl-t-Butyl Ether	42456-14	<0.50	40.0	40.0	37.3	37.2	ug/L	EPA 8260B	2/23/05	93.2	93.1	0.115	70-130	25	25
Benzene	42472-01	<0.50	40.0	40.0	37.0	36.5	ug/L	EPA 8260B	2/23/05	92.4	91.3	1.22	70-130	25	25
Toluene	42472-01	<0.50	40.0	40.0	37.6	37.2	ug/L	EPA 8260B	2/23/05	94.0	93.1	0.964	70-130	25	25
Tert-Butanol	42472-01	10	200	200	204	202	ug/L	EPA 8260B	2/23/05	96.8	95.9	1.00	70-130	25	25
Methyl-t-Butyl Ether	42472-01	120	40.0	40.0	160	158	ug/L	EPA 8260B	2/23/05	91.7	87.1	5.20	70-130	25	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joel Kiff

